

Application No. 10/768,368
Date: October 24, 2005

Please amend the claims as follows:

1. (Currently Amended) A light appliance and a cooling arrangement, comprising:
 - a) a light appliance;
 - b) a substantially sealed liquid-tight enclosure for the light appliance that gives off unwanted heat into surrounding air within the enclosure during operation, the enclosure having an external wall at least part of which is thermally conductive;
 - c) a medium that is in contact with said external wall of the enclosure; and the medium
 - a) having adequate thermal conductivity; and
 - b) being sufficiently cooler than the external wall of the enclosure
that an air circulating device for circulating air, heated by the light appliance or by the air circulating device, to the thermally conductive portion of the external wall ~~for removes~~ ~~ing~~ sufficient heat from the air by dissipating the heat into the cooler medium through said thermally conductive portion so as to substantially increase lifetime of the light appliance.
2. (Original) The combination of Claim 1, wherein the light appliance comprises a filamented lamp.
3. (Original) The combination of Claim 2, wherein the filamented lamp comprises molybdenum leads.
4. (Original) The combination of Claim 2 wherein the lamp is a halogen lamp.
5. (Original) The combination of Claim 1, wherein the light appliance comprises a high intensity discharge lamp.
6. (Original) The combination of Claim 5, wherein the high intensity discharge lamp comprises molybdenum leads.
7. (Original) The combination of Claim 5, wherein the lamp is a high pressure sodium lamp, a high pressure mercury vapor lamp, or an ultrahigh pressure mercury lamp.
8. (Original) The combination of Claim 1, wherein the light appliance further comprises a heat sink for removing heat from the light appliance.
9. (Original) The combination of 1, wherein the light appliance comprises an LED.
10. (Original) The combination of Claim 9, wherein the light appliance further comprises a heat sink for removing heat from the LED.

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11. (Original) The combination of Claim 1, wherein the medium comprises water.
12. (Original) The combination of Claim 1, wherein the medium comprises a solid.
13. (Original) The combination of Claim 12, wherein the solid includes a cooling device for cooling the solid to a sufficiently low temperature to allow substantial dissipation of heat from within the enclosure into the solid through said thermally conductive portion.
14. (Original) The combination of Claim 1 wherein the medium comprises air.
15. (Original) The combination of Claim 14, wherein the air comprises circulating air.
16. (Original) The combination of Claim 1, wherein the air circulating device comprises an electrical fan.
17. (Original) The combination of Claim 1, wherein the air circulating device comprises a heat pump or an air pump.
18. (Original) The combination of Claim 1, wherein the thermally conductive wall comprises stainless steel.
19. (Original) The combination of Claim 18, wherein the thermally conductive wall further comprises glass.
20. (Original) The combination of Claim 1, wherein the thermally conductive wall comprises a thermally conductive plastic.
21. (Currently Amended) A light appliance with a cooling arrangement, comprising:
 - a) a light appliance;
 - b) a sealed liquid-tight enclosure for the light appliance that gives off unwanted heat into surrounding air within the enclosure during operation, the enclosure having an external wall at least part of which is thermally conductive;
 - c) a medium that is in contact with said external wall of the enclosure; and the medium
 - a) having adequate thermal conductivity; and
 - b) being sufficiently cooler than the external wall of the enclosure
that an air circulating device for circulating air, heated by the light appliance or by the air circulating device, to the thermally conductive portion of the external wall for removes the sufficient heat from the air by dissipating the heat into the cooler medium through said thermally conductive portion so as to substantially increase lifetime of the light appliance.

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22. (Original) The combination of Claim 21, wherein the light appliance comprises a filamented lamp or a high intensity gas discharge lamp.
23. (Original) The combination of Claim 22, wherein the light appliance further comprises a heat sink for removing heat from the lamp.
24. (Original) The combination of Claim 22, wherein the thermally conductive wall comprises stainless steel.
25. (Original) The combination of Claim 24, wherein the thermally conductive wall further comprises glass.
26. (Original) The combination of Claim 21, wherein the thermally conductive wall comprises a thermally conducting plastic.
27. (Currently Amended) A light appliance with a cooling arrangement, comprising:
 - a) a light appliance;
 - b) a sealed liquid-tight enclosure for the light appliance that gives off unwanted heat into surrounding air within the enclosure during operation, the enclosure having an external wall at least part of which is thermally conductive;
 - c) a medium that is in contact with said external wall of the enclosure; and the medium
 - a) having adequate thermal conductivity; and
 - b) being sufficiently cooler than the external wall of the enclosure
that an air circulating device for circulating air, heated by the light appliance or by the air circulating device, to the thermally conductive portion of the external wall ~~for removes~~ ing sufficient heat from the air by dissipating the heat into the cooler medium through said thermally conductive portion so as to substantially increase lifetime of the light appliance.
28. (Original) The combination of Claim 27, wherein the light appliance comprises a filamented lamp or a high intensity gas discharge lamp.
29. (Original) The combination of Claim 28, wherein the light appliance further comprises a heat sink for removing heat from the lamp.
30. (Original) The combination of Claim 28, wherein the thermally conductive wall comprises stainless steel.

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31. (Original) The combination of Claim 30, wherein the thermally conductive wall further comprises glass.
32. (Original) The combination of Claim 21, wherein the thermally conductive wall comprises a thermally conducting plastic.
33. (New) The combination of Claim 1, wherein the medium:
 - a) has adequate thermal conductivity; and
 - b) is sufficiently cooler than the external wall of the enclosure

as to eliminate the need for heat fins projecting inwardly from the inner surface of said external wall.

34. (New) The combination of Claim 1, wherein the medium:

- a) has adequate thermal conductivity; and
- b) is sufficiently cooler than the external wall of the enclosure

as to eliminate the need for directing said air, heated by the light appliance or by the air circulating device, into a channel formed between an interior surface of the external wall of the enclosure and a sleeve surrounding the light appliance.